Translation and Adaptation of Carolina Premenstrual Assessment Scoring System

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Abstract

Premenstrual dysphoric disorder (PMDD) is a severe and enervating premenstrual mood disturbance with a wide variety of symptoms, including depression, anxiety, lack of interest in life, tearfulness, irritability, anger, difficulty in concentration, appetite changes, weight gain, muscle and joint pain, sleep disturbance, and suicidal thoughts (Huston & Fujitsubo, 2002). The present study aimed to translate the Carolina Premenstrual Assessment Scoring System into Urdu. For this purpose, the study was carried out in two steps. Step 1 used MAPI guidelines for translating psychometric measures into Urdu Language. In step 2, the a priori method was used to establish the construct validity of the Carolina Premenstrual Assessment Scoring System.

Keywords: Carolina Assessment Scoring, Premenstrual Dysphoria Disorder, Translation.

Introduction

Premenstrual dysphoric disorder (PMDD) is a cluster of physical, behavioral, and emotional symptoms that appear on a regular basis at the start of menstrual bleeding. Premenstrual Dysphoric disorder comes in different varieties and severities (Dell & Facog, 2003). The experience of these symptoms is severe and affects both the woman and those around her. Certain women documented the presence of physical and clinical symptoms that recur during the same days of each menstrual cycle. Still, many health practitioners have not given adequate attention to PMDD (Atkinson & Kozitza, 1988).

According to the statistics reported in DSM-IV-TR, PMDD is present in 3 to 5% of women of menstrual age. Among this number, 90.6 % of the women consider these symptoms as non-pathological, while 18.7% of women seek professional help. Its prevalence ranges between 1.8% to 5.8% in 12 months for menstruating women. The women meeting the full criteria of PMDD without functional impairment constitute 1.8% of the population, while those with functional impairment make up 1.3% of the total population (APA, 2013). The disorder has been reported in countries like the United States, Great Britain, Italy, Nigeria, China, Pakistan, and India ((Dell & Facog, 2003).

Diagnostic Markers

The Premenstrual Dysphoric Disorder is confirmed by 2 months of cyclic symptoms ratings. Many assessment tools have been developed to evaluate Premenstrual Dysphoric Disorder, such as the Daily Rating of Severity of Problems (DRSP) (Endicott et al., 2006) and the Visual Analogue

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Scales (VAS) for Premenstrual Mood Symptoms, have shown validation and are commonly used in clinical trials while the Premenstrual Tension Syndrome Rating Scale (PMTS; self-report & an observer version) has been validated and widely used to measure illness severity in women with Premenstrual Dysphoric Disorder (APA, 2013). Daily Symptom Rating (DSR), Premenstrual Symptoms Screening Tool (PSST), Premenstrual Dysphoria Disorder Questionnaire (PMDDQ), and Carolina Premenstrual Assessment Scoring System (C-Pass) are widely used to determine PMDD and its severity. The premenstrual Distress Questionnaire (PDQ) was frequently used in Western and Eastern cultures to evaluate distress in PMDD women (Aperribai et al., 2016).

Objectives

The objectives of the study include:

- 1. To translate the tool into Urdu language.
- 2. To establish the construct validity of the Urdu version of the scale.

Methodology

The method employed in this study is given as follows:

Research Design

This was based on a quantitative paradigm comprising two steps. Step 1 was designed to translate the Carolina Premenstrual Assessment Scoring System-C-PASS (Eisenlohr et al., 2017) by using the standard procedure of internationally accepted translation methodology recommended by the MAPI Research Institute (Gudmundsson, 2009). In step 2, a priori method was used to establish construct validity.

Sample and Sampling Criteria

The sample for forward translation comprised of 2 bilingual native speakers. The participants were required to have clinical experience of at least 5 years and prior experience in translation and adaptation of at least three psychological tools. The sample for backward consisted of 2 bilingual speakers required to have clinical experience of at least 5 years, prior experience in translation and adaptation of at least three psychological tools, and previous experience with the Original English Version of the translated psychological measure/tool.

Measurement

Carolina Premenstrual Assessment Scoring System

Carolina Premenstrual Assessment Scoring System (C-PASS) is a standardized scoring system developed by Eisenlohr et al. in 2017. This scoring system is used to differentiate among women with no cycle diagnosis, MRMD (Menstrually Regulated Mood Disorder) cycle diagnosis, and PMDD cycle diagnosis. C–PASS uses DSM-5 criteria with the help of 2 or more menstrual cycles of daily symptom ratings on the Daily Record of Severity of Problems (DRSP). Criterion validity of the scale was found by comparing CPASS decisions (MRMD vs. no MRMD) and expert diagnosis, which was agreed upon to be 94.3%.

Procedure

Formal written Permission for translating Original English Version of Carolina Premenstrual Assessment Scoring System- C-PASS (Eisenlohr et al., 2017) into Urdu Language was sought from the respective author. To ensure a rigorous process of translation, as well as, to achieve

equivalence between the English and Urdu versions of scales, the translation was carried out using MAPI guidelines (Gudmundsson, 2009). The aim of this linguistic validation process was to obtain translation of an original instrument in a target language that is both conceptually equivalent to the original instrument and easily understood by the people to whom the translated questionnaire is administered. The standard linguistic validation process recommended by MAPI Research Institute was used in the study including conceptual analysis, recruitment and briefing, forward translation, backward translation, review of the forward and backward translation, pilot testing, cognitive restructuring, and proof-reading.

Translation of English version of scoring system into Urdu was carried out by two bilingual native speakers (sample 1) living in Lahore, Pakistan. The translators were instructed to translate each item of the scorings system keeping in mind conceptual rather than the literal meaning of the items. The finalized proof read drafts of scoring system were given for backward translation to two bilingual translators (Sample 2) who were not familiar with the original scales. Both the translators were given the same instructions as previously given to the two translators who were involved in the forward translation procedure. A group of three bilingual experts were taken to review similarities and differences between the original English version of the scoring system and the backwards translated version. This discussion provided a qualitative review for every translated item to ensure clarity in language, use of common language as well as conceptual adequacy of items. The Urdu translated version of C-PASS was sent back to the author for review purpose. After reviewing, modifications were carried out in C-PASS as per the suggestions mentioned by the author.

Determination of Psychometric Properties of C-PASS

The psychometric properties of the Urdu translated version of C-PASS were established by following methodology:

Sample

The sample consisted of 9 practicing clinical psychologists recruited for a-priori method having experience in assessment and women healthcare.

Measure

Carolina Premenstrual Assessment Scoring System (Eisenlohr et al., 2017) was used for translation in to Urdu language for the present study.

Procedure

After the scale was translated into Urdu language, 9 practicing clinical Psychologists were requested for a-priori method on Carolina Premenstrual Assessment Scoring System (Eisenlohr et al., 2017). They independently reviewed the measure, assessing its clarity, comprehensiveness, and clinical applicability. Item wording, relevance and any potential redundancies were reviewed through quantitative and qualitative feedback by the participants. The necessary modifications were identified and applied to ensure that the measure accurately captures premenstrual symptoms while maintaining psychometric integrity. The recommendations of the participants were used to revise the instrument to enhance its validity.

Results

Table 1: Average expert ratings in terms of appropriateness on the statements of C-PASS (N=9)

Items	Average Expert Ratings	
Name	6.1	
Instructions	7.5	
Instructions	8.5	
1	8.4	
A	7.7	
В	7.8	
2	8.2	
A	6.6	
В	8.1	
3	7.5	
A	7.2	
В	7.1	
С	7.1	
D	6.7	
Е	8.4	
F	8.7	
4	9.2	
A	8.8	
В	8.7	
5	8.5	
A	8.3	
6	8.2	
A	8.1	
В	8.1	
7	8.1	
A	9.1	
Instructions	9.2	
8	9.3	
A	8.7	
9	8.7	
A	8.1	
В	9	
10	8.3	
A	9.4	
В	8	
C	8.5	
Heading	9.1	
Instructions	9	
Handin a	8.5	
Heading	6.5	

Items	Average Expert Ratings
Phrase	9
Phrase	9
Phrase	9.6
Phrase	9.2
Phrase	7.2
Phrase	9
Term	9.2
1	9.3
2	9.7
2 3	8.2
5	8.8.
5	9.3
6	9.2
7	9.5
8	9
Term	9.2
9	8.8
10	9.3
11	9.5
12	9.6
13	9.4
14	9.7
15	9.6
16	9.3
17	9.5
18	9.2
19	9.3
20	9.8
21	9.8
Term	9.8
22	8.2
23	9.8
24	9.8
Term	7.8
Phrase	9.5
Phrase	8.2
Phrase	8.5
Phrase	8.5
Phrase	9.2
Phrase	8.2
Phrase	8.3
Phrase	9
Phrase	7.8
Phrase	8.4

Items	Average Expert Ratings
Phrase	8.2
Phrase	8.2
Phrase	8.1
Phrase	9
Phrase	8.8
Phrase	8.2
Instruction	8.8
Instruction	8.7
Phrase	8.7
Term	9.5
Term	9.2
Term	9.7
Term	9.7
Term	9.8
Term	9
Term	9.6
Term	9.8
Term	9.8
Term	8.8
Term	9.6
Instruction	8.7
Instruction	9
Instruction	8.8
Instruction	8.3
Term	9.1
Instruction	9
Instruction	9
Phrase	8.3
Instruction	8.3
Instruction	8.4
Instruction	8.5
Term	8.7
Term	8.7
Term	8.8

Table 1 shows the average of expert ratings on the translated items during the process of forward and backward translation. Items with high ratings indicate that those items are a true reflection of the original item. All of the items having ratings above 7 are good for retention. Further analysis of EFA and CFA were run on all of these items to check communalities and factor loadings.

Discussion

The usage of translated but unstandardized psychological tools in a variety of applied settings is quite common than expected while considering standards for appropriate use of test. There is lack of information on the nature and extent of use of such tests in different countries but results from International

surveys show that adjustment of tests for usage in countries other than those in which they are developed is widespread (Gudmundsson, 2009). In the similar way, standardization of C-PASS in Pakistani culture is a first step towards the creation of high-quality, effective healthcare instruments. Moreover, C-PASS has not been translated into any other language so far and this translation into Urdu language is the first one to happen.

The main objective of the present endeavor was to translate and adapt Carolina Premenstrual Assessment Scoring System-C-PASS (Eisenlohr et al., 2017) by using standard procedure of translation methodology that is internally accepted and recommended by MAPI Research Institute (Gudmundsson, 2009). The results suggested that experts rate the appropriateness of C-PASS between 6.1 and 9.8 on average. This agreement was in consistence with the original version where excellent agreement of C-PASS diagnosis with expert clinical diagnosis was indicated. The overall correct classification by the C-PASS was estimated at 98% (Eisenlohr-Moul et al., 2017). Moreover, the methodology focused on creating a conceptually equivalent translation of the scale. This is in line with the available literature that asserts that psychometric measures should provide an unbiased and fair representation of the underlying concept after being correlated with conceptually related measures. This ensures the validity and reliability of the measurement scale as depicted in the following study.

Findings from this study provide support for the validity and reliability of the Urdu versions of the C-PASS. Although confirmation of the current study's early results would need more research, the introduction of these instruments to the field of psychological evaluation might be an important step for researchers interested in menstrual discomfort and subjective well-being.

Conclusion

The present study was aimed to translate Carolina Premenstrual Assessment Scoring System into Urdu language using MAPI guidelines for translating psychometric measure. The process of translation was purposed to ensure the conceptual and linguistic equivalence of the both versions to maintain the integrity of the original assessment tool. A priori method was used to establish construct validity of the Carolina Premenstrual Assessment Scoring System. The results suggested that experts rated the appropriateness of C-PASS between 6.1 and 9.8 on average. This agreement was in consistence with the original version where excellent agreement of C-PASS diagnosis with expert clinical diagnosis was indicated. Although further confirmation is required through more research, this translation contributes majorly in taking a step forward in the evaluation of premenstrual symptoms and their impact on well-being of women in Urdu-speaking population. It marks a significant advancement in assessing menstrual discomfort and well-being.

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